## State of Wisconsin/Department of Transportation RESEARCH PROGRESS REPORT FOR THE QUARTER ENDING: December 31, 2002

Project ID 0092-45-17

Project Title Benefit Evaluation of Ramp Meters and Variable Message Signs in Wisconsin

**Approved Starting Date (Contract Date): 10/2/2000** 

**Estimated Completion Date: 10-2-2002** 

Primary Investigator: Bin Ran, University of Wisconsin - Milwaukee

WisDOT Technical Contact: John Corbin Administrative Contact: Nina McLawhorn

**Description:** This study is aimed at determining the benefits of ramp meters and variable message signs in the Milwaukee area of Wisconsin. For ramp meter evaluation, three measures of effectiveness will be focused on: collision reduction, delay reduction and traffic diversion behavior. For variable message sign evaluation, information will be gathered on time-savings, stress reduction, increased arrival time certainty and other driver benefits. Literature reviews, surveys, before/after data and system modeling will be used in the evaluations.

**Project Cost: \$150,000** 

Expenditures for current quarter: \$10,696 Total Expenditures to date: \$102,213

Percent Complete: 80 %

<u>Progress This Quarter</u>: (Includes project committee meetings, work plan status, contract status, significant progress, etc.)
The investigating team obtained a copy of the Paramics traffic modeling software, and a model of the SE Wisconsin
Freeway System from a DOT consultant. Work was partially completed on the "System Model" to evaluate and predict ramp metering benefits.

Work Next Quarter: (Includes project committee meetings, work plan status, contract status, significant progress, etc.)
Work will continue on the development of a "System Model" to evaluate and predict ramp metering benefits. The traffic flow and crash analysis for the US45 Corridor will be completed. Investigators will begin to synthesize benefits results into final documentation

## **Circumstances Affecting Progress/Budget:**

Obtaining the completed traffic model (free-of-charge) from the DOT consultant required that the investigating team had to accommodate the consultant's schedule. This incurred limited delay.